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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/924,863

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Huima Antti

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32294

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03/16/2005

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EXAMINER

GESESSE, TILAHUN

ART UNIT

PAPER NUMBER

2684

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/924,863

Applicant(s)

ANTTI, HUIMA

Examiner

Tilahun B Gesessse

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) 1-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-42 and 58-68 is/are rejected.
- 7) ☒ Claim(s) 43-57 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. Request for continued examination (RCE) filed 12/22/04 is acknowledged, in which claim 1-32 canceled and claims 33-68 are pending.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 33-42, 58-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yahagi (US 5642 401) in view of Murto (US 5,991,407).

As to claims 33,62-63 Yahagi discloses a method of securing communication (fig.1) between a first party (mobile station 1) and a second party in a telecommunication network (network) comprising: defining a criteria for selecting one of a plurality of different security methods (column 2, lines 7-24), the plurality of security methods each at least two different security method having at least one message in common (column 3, lines 1-28),

Yahagi discloses selecting one of the plurality of different security methods in accordance with said defined criteria and performing said security method the steps as taught in , column 2 lines 7-13 and column 3 lines 1-28).

Yahagi differs in teaching a plurality of messages selected from a set of messages types. However, Murto discloses plurality of messages selected from a set of message types (plurality of IMSI and Ki stored are selected for securing the communication (see figures 6-7 and see column 6, line 61-column 8, line 12). It would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to select a message from plurality of messages stored in the database to secure communication between a mobile terminal and wireless communication network, as evidenced by Murto, in order to identify the user and secure the communication from intruders by that minimize cost of air time of the system or service provider.

At to claim 34, Yahagi discloses the criteria are to select the security method is selected at random (column 3 lines 58-column 4, line 4). As to claim 35, Yahagi discloses processing capability of the first and second party (mobile and BS/MSC/DB, column 2 lines 55-68 and figure 6). As to claim 36, Yahagi inherently discloses select the security based on the amount of time since last security method was performed. As to claim 37, Yahagi discloses security method is based on the function provided by the security method (authentication calculation result "function" (figure 3). As to claim 38, Yahagi discloses the plurality of security methods comprising at least one authentication method or at least one rekeying method (figure 3). As to claim 39, Yahagi inherently discloses at least one authentication method includes a key exchange to create a shared secret.

As to claims 40 and 42,58-59 Yahagi discloses a rekeying method is performed after an authentication method (column 3, lines 60-67). As to claim 41 and 43,57,

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Yahagi discloses the set of messages includes at least one random number message (column 3, lines 60-67 and figure 1). As to claim 49, Yahagi discloses the security method is a first rekeying method and comprising first and second random number message (using random number at the mobile station, authentication calculation and using random number at the data base , authentication result, (figure 3 and it's disclosure). As to claim 54, Yahagi discloses one message being from the first party and the other message being from the second party ( figure 3, and it's disclosure).

As to claim 55, Yahagi inherently discloses the encoding message is used for transfer information as to the identity of at least one of the first and second parties to the other of the first and second parties. As to claim 56, Yahagi inherently discloses at least one of said first and second parties is arranged to communicate with a trusted third party and is arranged to receive messages from and/or send messages to that trusted third party. As to claim 60-61, Yahagi discloses at least one of the first and second stations comprise a mobile station and a base station (figure 1).

Regarding claims 64-68, Yahagi discloses a method of securing communication (fig.1) between a first party (mobile station 1) and a second party in a telecommunication network (network) comprising: defining a criteria for selecting one of a plurality of different security methods (column 2, lines 7-24), the plurality of security methods each at least two different security method having at least one message in common (column 3, lines 1-28),

Yahagi discloses selecting one of the plurality of different security methods in accordance with said defined criteria and performing said security method the steps as taught in , column 2 lines 7-13 and column 3 lines 1-28).

Yahagi differs in teaching a plurality of messages selected from a set of messages types. However, Murto discloses plurality of messages selected from a set of message types (plurality of IMSI and Ki stored are selected for securing the communication (see figures 6-7 and see column 6, line 61-column 8, line 12). It would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to select a message from plurality of messages stored in the database to secure communication between a mobile terminal and wireless communication network, as evidenced by Murto, in order to identify the user and secure the communication from intruders by that minimize cost of air time of the system or service provider.

***Allowable Subject Matter***

4. Claims 43-57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach the set of messages includes at least one of the following message types: at least one tandom number message', at least one hash function message', at least one signature function message; at least one parameter for use with a given function message; at least one security parameter message; at least one key for

a given function message; at least one encoded message; at least one message to and/or from at least one third party; and at least one authentication response message.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 33-42,57-63 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Barney et al (EP 602,335) discloses a securing between two parties and method of selecting and a common key generation and ciphering algorithm, see abstract.

Bostley, III et al (US 6,201,871) discloses method of security of the A-keys in a wireless communication system. The method of securing communication effectively prevents a human access to A-keys and eliminates cloning. (See abstract).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 703-308-5873. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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February 28, 2005

  
**TILAHUN GESESSE**  
**PRIMARY EXAMINER**